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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/777,623 | 02/11/2004 | Vilem Petr | 5086-1 | 4614 |
| 22442 | 7590 | 05/31/2006 | EXAMINER | |
| SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202 | | | MARCANTONI, PAUL D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1755 | |

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/777,623 | Applicant(s) PETR ET AL. | |
| | Examiner Paul Marcantoni | Art Unit 1755 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/13/04</u> . | 6) <input type="checkbox"/> Other: _____ |

35 USC 112 First Paragraph:

Claims 18-19 are rejected under the first paragraph of 35 USC 112 as these claims are not commensurate with applicants' enabling disclosure.

Claims 18-19 cannot achieve the torsional modulus and compressive strength values in these claims without the specific recitation of Portland cement, fly ash, and water which are in specific ranges of amounts to achieve these properties. Applicants do not have support and are not enabling for any cement, any components, and in any amounts.

35 USC 112 Second Paragraph:

Claims 1-21 are rejected under the second paragraph of 35 USC 112 for failing to particularly pointing out and distinctly claim the claimed invention.

The use of the term "predetermined" throughout the claims is indefinite and its removal is advised.

The terms "is adapted to pass" is indefinite but can be corrected by simply substituting the word –passes—in its place throughout the claims.

35 USC 103:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21 are rejected under the first paragraph of 35 USC 103(a) as unpatentable over Frankowski '226, Zandi et al. '751, Leroy-Delage et al. '929 B2, Brothers et al. '787, Rigot (BE 1008040 abstract), Kalmar-Nagy (HU 54594 abstract), Gorlov et al. (SU 1300006 abstract), Lee et al. (WO 2000027774 abstract), or Ventalon et al. (FR 2831162 abstract).

All of the references above teach a concrete composition comprising rubber aggregate/particles in the range amounts claimed by applicants for their instantly claimed invention. Overlapping ranges of amounts would have been prima facie obvious to one of ordinary skill in the art. Further, it is expected that physical properties such as compressive strength would be the same because the components are the same as claimed by applicants and in overlapping amounts. It is also noted applicants cannot argue limitations not claimed for properties such as compressive strength for the reasons explained above under the first paragraph of 35 USC 112. Applicants only attain those compressive strength values using a specific range of amounts of cement (specifically Portland cement) a specific range of amounts of aggregate (e.g. sand, fly ash), a specific range of amount of water, and a specific range of amount of rubber aggregate in a specific particle size. None of these properties are in the independent claims so applicants cannot rely on physical properties when they do not have the completeness of the components that attain those physical properties such as compressive strength.

The applicants also teach a specific particle size range yet they have not shown it critical. It would have been an obvious design choice to control particle size of cement

powder, aggregate, rubber particle, etc. absent a showing of criticality or unexpected results.

The applicants also claim that they use specific shapes (zig zag, square, triangle, rectangle, octagon, cross) which is not alleged to be done in the prior art for rubber aggregate. In rebuttal, the shearing of particles to comminute rubber would lead to a multitude of different shapes from spherical, square, rectangular, triangular, etc. Even assuming that these shapes did not occur even by shearing or comminution, applicants have not shown that the use of specific shapes is critical or leads to an unexpected result over the prior art. It is further noted that there is also motivation to use specific shapes (ie spherical, square, rectangular, cross shaped, etc) for aesthetic or artistic purposes for a specific look or desired result. This is also motivation for concrete walkways, walls, etc. to provide a certain aesthetic appeal.

The applicants method takes into account that rubber could already be cut or comminuted into a specific shape. It is evident that sorting to specific ranges of amounts, selecting a specific shape (or perhaps color as well) of rubber for aesthetic value, and adding the proper amounts of cement, water, and rubber ultimately do depend on end use as the use for a wall may not require the same amounts of ingredients as perhaps a walkway which could require greater compressive strength and anti-skid properties (from the rubber aggregate). One of ordinary skill in the art would have understood that he or she could control these factors depending again on end usage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Marcantoni whose telephone number is 571-272-1373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul Marcantoni
Primary Examiner
Art Unit 1755